geotech

Multispectral Camera

MicaSense RedEdge-MX Multispectral Camera

The MicaSense RedEdge-MX is a rugged, built-to-last, professional multispectral sensor for agricultural and vegetation management drone mapping. RedEdge-MX captures five spectral bands, and is one of the most flexible solutions on the market. With optimized GSD (resolution); the new DLS 2 light sensor; the ability to generate plant health indexes and RGB (color) images from one flight. An advanced sensor means that you can count on getting high quality, accurate data when you need it.

KEY FEATURES

- Five narrow spectral bands captured during flight.
- High image resolution; 8 cm/pixel at 400 ft. (120 m).
- Single SD card stores all images with geotags.
- Standalone operation, with optional external trigger and data from host aircraft.
- Web-based configuration page accessed from any Wi-Fi-capable device.
- Embedded mounting points for easier integration.
- Global shutter imagers doesn't require a gimbal.

PROFESSIONAL MULTISPECTRAL CAMERA KIT

- Metal enclosure for extreme durability
- DLS 2 for enhanced light calibration
- · Captures five narrow spectral bands
- Generates plant health indexes and RGB (color) images from one flight
- Designed for easy and flexible integration
- Calibrated for precise, repeatable measurements
- Operates in temperatures up to 60°C or 140°F



CALL GEOTECH TODAY (800) 833-7958

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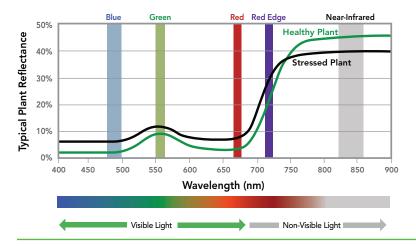
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SPECTRAL BANDS



Solid science, no guesswork

Plants reflect light in a predictable pattern across the color spectrum. These patterns are correlated to crop vigor and stress as well as nutrient information.

Multispectral imaging uses cameras with narrowband filters to optimally sense plant reflectance, delivering the information needed to assess the status of your crops. This capability enables growers and agronomists to alter nutrient inputs and take action to address disease based on actual field conditions.

DETAILED INFORMATION MAPS



0.843 0.856 0.869 0.881 0.907

0.780 0.792

0.805 0.818

0.830







RGB color composite

NDVI (Normalized Difference Vegetation Index)

NDRE (Normalized Difference Red Edge)

SPECIFICATIONS

Weight 231.9 g (8.18 oz.) (Includes DLS 2 and cable) **Dimensions** 8.7 cm x 5.9 cm x 4.54 cm (3.4 in. x 2.3 in. x 1.8 in.) **External Power** 4.2 V DC - 15.8 V DC, 4 W nominal, 8 W peak

Spectral Bands Blue, green, red, red edge, near IR

(global shutter, narrowband)

Global shutter, aligned with all bands **RGB Output**

Ground Sample Distance 8 cm per pixel (per band) at 120 m (~400 ft.) AGL

1 capture per second (all bands), 12-bit RAW **Capture Rate** Interfaces

Serial, 10/100/1000 ethernet, removable Wi-Fi,

external trigger, GPS, SDHC

Field of View 47.2° HF0V

Custom Bands 400nm - 900nm (QE of 10% at 900nm)

Triggering Options Timer mode, overlap mode, external trigger mode (PWM, GPIO, serial, and Ethernet options), manual

capture mode

0-40°C ambient (no airflow): Heat

0-50°C ambient with airflow > 0.5m/s

Kit Contents • RedEdge-MX sensor

- Lens cover
- Calibrated Reflectance Panel
- New DLS 2 light sensor with integrated GPS
- RedEdge-MX and DLS 2 cables
- Mounting screws
- Hard carrying case

